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## WHAT IS CLAIMED IS:

1. An intelligent network for use with an ATM network to set up an ATM switched virtual circuit to provide VToA services and point-to-multipoint connectivity, the intelligent network comprising:

a multi-service control point operable to receive an input extracted from an input ATM setup message that includes a called party phone number value, a VToA designator, and a request to establish a point-to-multi-point connection, enforce policies regarding the establishment of point-to-multipoint connections, and generate an output in response for use in generating an output ATM setup message;

an ATM signaling intercept processor operable to intercept the input ATM setup message from an ingress ATM edge switch of the ATM network, extract the input from the input ATM setup message, communicate the input to the multi-service control point, receive the output generated by the multi-service control point, generate the output ATM setup message using the output, and communicate the output ATM setup message to the ingress ATM edge switch of the ATM network; and

a service administration operable to provision the multi-service control point and the ATM signaling intercept processor.



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2. The intelligent network of Claim 1, wherein the multi-service control point, in order to enforce policies regarding the establishment of point-to-multipoint connections, is operable to perform the following:

receive a request from a calling party to establish a point-to-multipoint connection,

determine if the calling party is authorized to make point-to-multipoint connections,

reject the request if the calling party is not authorized to establish point-to-multipoint connections,

analyze the request to determine if the bandwidth requested for the point-to-multipoint connection is within authorized bandwidth limits, and

reject the request if the bandwidth requested is not within authorized bandwidth limits.

3. The intelligent network of Claim 1, wherein the multi-service control point, in order to enforce policies regarding the establishment of point-to-multipoint connections, is further operable to perform the following:

allow the point-to-multipoint connection to be established if the calling party is authorized to make point-to-multipoint connections and the bandwidth requested is within authorized bandwidth limits.

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4. The intelligent network of Claim 1, wherein the multi-service control point, in order to enforce policies regarding the establishment of point-to-multipoint connections, is further operable to perform the following:

receive a leaf request from the calling party to add a leaf node to an existing point-to-multipoint connection,

analyze the leaf request to determine if the maximum number of leaf nodes has been exceeded, and reject the leaf request if the maximum number of leaf nodes has been exceeded, but allow the existing

point-to-multipoint connection to proceed without the

requested leaf.

- 5. The intelligent network of Claim 1, wherein the called party phone number value is stored in the called party subaddress parameter of the input ATM setup message, the VToA designator is stored in the called party number parameter of the input ATM setup message.
- 6. The intelligent network of Claim 1, wherein the input ATM setup message is a request to setup a point-to-multipoint connection, and the input extracted from an input ATM setup message and provided to multi-service control point includes a bandwidth request value that indicates the bandwidth requested for the point-to-multipoint connection.

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- 7. The intelligent network of Claim 6, wherein the called party phone number value is stored in the called party subaddress parameter of the output ATM setup message, the ATM address of the called party is stored in the called party number parameter of the output ATM setup message, the calling party phone number value is stored in the calling party subaddress parameter of the output ATM setup message, and the ATM address of the calling party CPE is stored in the calling party number parameter of the output ATM setup message.
- 8. The intelligent network of Claim 1, wherein the multi-service control point determines if the input ATM setup message requests an SVC for VToA by analyzing the VToA designator portion of the input.
- 9. The intelligent network of Claim 2, wherein the multi-service control point further includes:

a database that correlates point-to-multipoint authorization information with the calling party, and correlates the called party phone number value with an ATM address of the called party CPE, and wherein the multi-service control point includes the ATM address of the called party CPE in the output.

- 10. The intelligent network of Claim 1, wherein the multi-service control point is operable to track the number of leaf nodes of a point-to-multipoint connection.
- 11. The intelligent network of Claim 1, wherein the multi-service control point is operable to track the allocated bandwidth of a point-to-multipoint connection.

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- 12. The intelligent network of Claim 1, wherein the multi-service control point is operable to track the number of leaf nodes of a point-to-multipoint connection, and to track the allocated bandwidth of a point-to-multipoint connection.
- 13. The intelligent network of Claim 1, wherein the content exchanged through a point-to-multipoint connection includes video.



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14. A method for providing a point-to-multipoint service to control point-to-multipoint connections using an intelligent network and a switched virtual circuit over an ATM network, the method comprising:

receiving a request from a calling party to establish a point-to-multipoint connection;

determining if the calling party is authorized to make point-to-multipoint connections;

rejecting the request if the calling party is not authorized to establish point-to-multipoint connections;

analyzing the request to determine if the bandwidth requested for the point-to-multipoint connection is within authorized bandwidth limits; and

rejecting the request if the bandwidth requested is not within authorized bandwidth limits.

- 15. The method of Claim 14, further comprising: allowing the point-to-multipoint connection to be established if the calling party is authorized to make point-to-multipoint connections and the bandwidth requested is within authorized bandwidth limits.
- 16. The method of Claim 14, further comprising: receiving a leaf request from the calling party to add a leaf node to the point-to-multipoint connection;

analyzing the leaf request to determine if the maximum number of leaf nodes would be exceeded if the leaf request were granted; and

rejecting the leaf request if the maximum number of leaf nodes would be exceeded.

17. The method of Claim 16, wherein leaf request is provided as an ATM add party message.

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- 18. The method of Claim 14, wherein the method uses a multi-service control point of the intelligent network.
- 19. The method of Claim 14, wherein the method is performed at an ingress of the ATM network.
- 20. The method of Claim 14, wherein the request is received from information generated from an input ATM setup message.
- 21. The method of Claim 14, wherein determining if the calling party is authorized to make point-to-multipoint connections is achieved using a profile associated with the calling party.
- 22. The method of Claim 14, wherein determining if the calling party is authorized to make point-to-multipoint connections is achieved using a customer profile that is associated with the calling party.

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